

Long-lived photoinduced absorption in granular molybdenum disulfide thin films

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Abstract

© 2018 Institute of Physics Publishing. All rights reserved. We present results of the differential photoinduced absorption spectra investigation of the molybdenum disulfide nanogranular thin films. The films were produced by means of a sulfurization of pre-deposited by magnetron sputtering thin molybdenum films. It has been shown that photoexcitation with the light quanta with the energy higher than the bandgap leads to a modification of the absorption spectra in the visible range. Possible nature of the photoinduced absorption spectra will be discussed.

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